

EXHIBIT D

Block Proposers

What is a Block Proposer?

A block proposer is a validator that has been pseudorandomly selected to build a block for a given slot in an epoch (there are 32 slots per epoch). Proposers are selected from the validator set using the standard RANDAO mechanism.

Validators not pseudo-randomly assigned to propose blocks are assigned to attest, or vote on block proposals. These assignments are known 2 epochs in advance for attesters and 1 for proposers. The block in each slot will have a single validator serving as the proposer and many validators serving as the attesters to all information in that block. Attesters get rewarded for accurately voting on current values of 3 aspects of the beacon chain: the head of the chain (LMD Ghost), the justified checkpoint and the finalized checkpoint (Casper FFG).

The Role of Block Proposers

Without MEV Boost, the original role of block proposers consisted of two jobs:

- (1) **building** the best block from all available transactions, and
- (2) **proposing** this block to the PoS network.

With MEV-Boost, the role of validator is simplified to **proposal** duties only, and consists of the following:

- Receive a block from their local execution client, i.e. their local block builder, and sign / 'propose' it, or
- Receive an execution payload header from one or more relays and blindly sign a block without seeing the underlying execution payload (i.e. the blinded TXs escrowed by the relay).

The Ethereum [consensus-specs](#) have well defined expectations of honest validators, the most recent standard is the [Bellatrix Honest Validator](#) specification.

